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09/807,513	07/06/2001	Patrick Cohen	065691/0217	9128

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EXAMINER	
QUAN, ELIZABETH S	

ART UNIT	PAPER NUMBER
1743	

DATE MAILED: 07/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/807,513	COHEN ET AL.	
	Examiner	Art Unit	
	Elizabeth Quan	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 May 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 6-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *4* is/are allowed.

6)☒ Claim(s) *1-3,6-25 and 27* is/are rejected.

7)☒ Claim(s) *16,26,27* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Specification

1. The disclosure is objected to because of the following informalities: It appears that BRIEF DESCRIPTION OF DRAWINGS should be added after the paragraph spanning lines 6-9 on page 7 not page 3. It is unclear why the heading DETAILED DESCRIPTION OF SOME OF THE EMBODIMENTS OF THE INVENTION is used. Does the specification describe all the figures? Is there a best mode of the invention not disclosed? In any event, the heading DETAILED DESCRIPTION OF THE INVENTION should be added on page 7 after the paragraph spanning lines 33-35.

Appropriate correction is required.

Claim Objections

2. Claim 16 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. It appears that oblong and elongate are synonyms. Orifices elongate in shape have already been recited.

3. Claim 27 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claim does not structurally limit the parent claim. It is unclear what structure makes the device adapted to automatically receive tubes from the laboratory analyzer and to automatically permit the laboratory analyzer to retrieve tubes from the laboratory analyzer to perform biological or chemical reactions.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. Claims 1-3, 6-23, 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claims 1, 8, 18 are rendered indefinite since it has been recited that the surface of the horizontal plate has a plurality of through orifices in lines 10 and 11 and the tubes have through orifices in line 17, such that the term "through orifices" is being used to address two different structures. The same problem occurs in claims 8 and 18. Possible modification: Omit "of the tubes" in line 17 of claims 1 and 8. Omit "of the tubes" in line 16 of claim 18.

7. Claim 2 is rendered indefinite by the placement of "in proximity to each other" since it unclear what elements are placed in proximity to each other. It is suggested that "in proximity to each other" be placed after "two swing trays" in line 12.

8. Claim 9 is rendered indefinite since it is unclear whether "the closure lid" in line 4 is the same as "the lid" in line 2. If they are the same, either omit "closure" in "the closure lid" in line 4 or add "closure" between "the" and "lid" of "the lid" in line 2. Similarly, it is unclear whether "a plate" in line 5 is the same as "horizontal plate" recited in claim 1. Additionally, only "a vessel" is recited in claim 1, such that "vessel(s)" in the last line does not make sense. It is also suggested that "in that" in line 3 could be omitted.

9. Regarding claim 15, the term "of the order of" is indefinite since it is unknown by how many mm more or less from the numerical dimension and still qualify to be "of the order of" that

numerical dimension. Furthermore, "of the order of" is used with magnitude and does not seem appropriate in the claim.

10. Claim 25 recites the limitation "the parallel mounting" and "the working plane". There is insufficient antecedent basis for this limitation in the claim.

11. Claim 25 is rendered indefinite since it is unclear what is the position of the swing tray with "pivoting axis of said swing trays is offset toward the center of the plate relative to the vertical axis passing through the center of gravity of each swing tray".

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

15. Claims 1, 6-8, 10-12, 14-17, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,665,047 to Brimhall in view of U.S. Patent No. 5,322,497 to Kobayashi.

Brimhall discloses a device for centrifuging chemical or biological products (fig. 2). The device comprises a casing (12) defining a cylindrical vessel (26), which contains a vertical central shaft (18) and horizontal plate (32). The vessel is open at the top when the cover (14), which is mounted so as to pivot on the casing, is pivoted open (fig. 2). The central shaft rotates by a rotary driving means (54) (figs. 2 and 3). The horizontal plate is mounted and interlocked with the central shaft (col. 3, line 51-col. 4, line 24). The horizontal plate is provided with through orifices (44a-f) for mounting tubes (fig. 2).

The orifices have a substantially elongate, oblong shape with front and rear walls that are inclined at an acute angle of less than 90 degrees relative to the horizontal (fig. 2). It appears that the rear and front walls are inclined by an angle of less than or equal to 60 degrees relative to the horizontal (fig. 2). Furthermore, it has been held that changing the form or shape is an obvious engineering design absent persuasive evidence that the particular configuration of the claimed invention was significant (*In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966)) and that where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from

the prior art device (*Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984)).

Although it is unclear whether the device is positioned on a horizontal working plate with an available area less than or equal to about 0.4 m^2, this is considered by the Examiner a recitation of intended use of the claimed invention. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPQ 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

The external "useful" height appears to be a matter of perspective. A person may decide that the external "useful" height corresponds to the height of the rotor. It appears that this limitation is intrinsicly met. Regardless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the height of the device of Goodman since it has been held that discovering an optimum workable range involves only routine skill in the art (*In re Aller*, 105 USPQ 233) and that where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device (*Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984)).

Brimhall discloses the desire to place tubes at predetermined positions. Brimhall does not explicitly disclose a means for indexing the position of the plate each time the plate stops to position the through orifices at predetermined sites. Kobayashi discloses means for indexing the position of the plate each time the plate stops to position the through orifices of the plate with baskets supporting jigs holding containers with orifices at predetermined sites (figs. 1 and 8). The indexing means comprises a disk (10), which is mounted below the horizontal plate and interlocked with the vertical central shaft (figs. 1 and 3). The disk is provided with a recess (10a) on its outer peripheral edge (fig. 3). A horizontal finger (12) contacts the disk with a stopper (12b), which is commonly known to be made of elastic means, such as rubber, when the plate is stopped and being indexed (fig. 3; col. 3, lines 5-12). In the event one would argue that the stopper is not made of elastic means, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the contacting means out of elastic since it is very well known to be an effective material for stopping objects in motion and absorbing shock. Regardless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Brimhall to include the indexing means of Kobayashi for effectively and accurately stopping the centrifuging process.

The limitation "the device is adapted to automatically receive tubes from the laboratory analyzer and to automatically permit the laboratory analyzer to retrieve tubes from the laboratory analyzer to perform biological or chemical reactions" is considered by the Examiner a recitation of intended use of the claimed invention. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure

is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPQ 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Furthermore, the laboratory analyzer is not positively recited, and the device is capable of cooperating with a laboratory analyzer to automatically permit the laboratory analyzer to receive tubes from the laboratory analyzer and to automatically permit the laboratory analyzer to retrieve tubes from the laboratory analyzer to perform biological or chemical reactions. Regardless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Brimhall in view of Kobayashi to include a laboratory analyzer to automatically receive and retrieve tubes for efficiency. Furthermore, it has been held that providing a mechanical or automatic means to replace manual activity, which has accomplished the same result, involves only routine skill in the art (*In re Venner*, 120 USPQ 192).

Brimhall discloses that the device is portable and configured to process a variety of sample containers having a preselected range of sizes (col. 1, lines 47-51). It appears that the orifices of the plate are capable of holding tubes with a volume of 2 ml or 5 ml. Tubes come in different lengths, and using tubes of different lengths could provide for volumes of 2 ml or 5 ml without changing the orifices of the plate or orifices of the jig. Regardless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide tubes that can hold volumes or 2 ml or 5 ml as necessary or desired to accommodate the sample size.

Brimhall does not specifically address the maximum rotational speed of the plate. The instant specification discloses that the maximum rotational speed is dependent on how many

tubes are being held and the volume of sample they hold. Furthermore, what one would consider being the maximum rotational speed appears to be a matter of perspective. The device of Brimhall could hold any number of tubes with any volume of sample and weigh down the device, such that the maximum rotational speed of the plate may be 13,000 revolutions/minute or 4,500 revolutions/minute or 5,000 revolutions/minute. Regardless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to accommodate more tubes with more samples, such that the maximum rotational speed is 13,000 revolutions/minute or 4,500 revolutions/minute or 5,000 revolutions/minute as necessary or desired to perform multiple separations simultaneously and efficiently for high-throughput.

Brimhall fails to disclose the claimed dimensions of the horizontal plate, casing, and vessel. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the dimensions of the horizontal plate, casing, and vessel in the device of Brimhall to centrifuge a particular number of samples with different volumes at one time as desired or necessary. Furthermore, it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art (*In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)) and that where the only difference between the prior art and the claims was a recitation of relative dimensions would not perform different than the prior art device, the claimed device was not patentably distinct from the prior art device (*Gardner v. TEC Systems, Inc.*, 725 F.2d 1388, 220 USPQ 77 (Fed. Cir 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984)).

Brimhall fails to disclose the horizontal plate with 48 orifices. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide

48 orifices in the horizontal plate of Brimhall to perform the desired number of separations at one time.

16. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,665,047 to Brimhall in view of U.S. Patent No. 5,322,497 to Kobayashi, and further in view of U.S. Patent No. 3,707,354 to Goodman.

Brimhall and Kobayashi each fails to disclose two identical vessels with two identical plates linked in rotation and driven simultaneously by a rotary driving means. However, it would have been obvious to one having ordinary skill in the art to modify the device of Brimhall in view of Kobayashi to include two identical vessels with two identical plates linked in rotation and driven simultaneously by a rotary driving means to complete as many desired or required separations at one time as taught by Goodman.

17. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,665,047 to Brimhall in view of U.S. Patent No. 5,322,497 to Kobayashi, and further in view of U.S. Patent No. 2,272,675 to Knudsen or U.S. Patent No. 1,831,860 to Harrison.

Brimhall in view of Kobayashi disclose all limitations except that the plate or swing tray is made of a metal. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the plate or swing tray of Brimhall in view of Kobayashi from aluminum since it is a non-magnetizing material as taught by Knudsen and acid resistant material as taught by Harrison.

18. Claims 18, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,665,047 to Brimhall in view of U.S. Patent No. 5,322,497 to Kobayashi, and further in view of U.S. Patent No. 5,834,420 to Laub et al.

Brimhall and Kobayashi disclose all limitations except that the plate or swing tray is made of a metal. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the plate or swing tray of Brimhall or Kobayashi out of a metallic material, such as high-strength INOX since it would be in keeping with pharmaceutical good manufacturing practices and can be subjected to sanitary treatment in situ as taught by Laub et al. (col. 10, lines 6-9).

19. Claims 25, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,322,497 to Kobayashi optionally in view of U.S. 4,990,130 to Prais and/or U.S. Patent No. 4,032,066 to Wright and/or U.S. Patent No. 3,762,635 to Hankey.

Kobayashi discloses a device for centrifuging chemical or biological products (fig. 1). The device comprises a casing (1) defining a vessel, which contains a vertical central shaft (4), horizontal plate (6), and means for indexing (10,10a, 12, 12a-c, 11, 11a, 13) (figs. 1, 3, 4, and 8). The vessel is open at the top when the cover (15) is slid open by actuator (15a) to expose opening (2b) (figs. 1 and 2; col. 2, lines 61-65). The vertical central shaft rotates by a rotary driving means (5) (fig. 1; col. 1, lines 25-28 and 40-45; col. 3, lines 50-57; col. 4, lines 7-10). The horizontal plate is mounted on and interlocked with the vertical central shaft (fig. 1; col. 1, lines 12-49; col. 2, lines 4-12 and 50-65). The horizontal plate is provided with arrangements for parallel mounting of trays (7) in proximity to each other for supporting two sample-receptacle holders (9) (fig. 1). The horizontal plate has two diametrically opposite notches in which the trays are mounted (fig. 1).

The means for indexing indexes the position of the plate each time the plate stops to position the through orifices of the plate with baskets supporting jigs holding containers with

orifices at predetermined sites (figs. 1 and 8). The indexing means comprises a disk (10), which is mounted below the horizontal plate and interlocked with the vertical central shaft (figs. 1 and 3). The disk is provided with a recess (10a) on its outer peripheral edge (fig. 3). A horizontal finger (12) contacts the disk with a stopper (12b), which is commonly known to be made of elastic means, such as rubber, when the plate is stopped and being indexed (fig. 3; col. 3, lines 5-12). In the event one would argue that the stopper is not made of elastic means, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the contacting means out of elastic since it is very well known to be an effective material for stopping objects in motion and absorbing shock.

When the plate is rotating in the centrifuging phase, the stopper is not in contact with the disk (fig. 1). The rotary driving means (5) is also the means for pivoting the plate until the finger cooperates with the recess of the disk since the instant specification states that the main motor used in centrifugal separation may also be the means for pivoting. It is unclear whether the rotary driving means pivots the plate in a stepwise manner. Conceivably, successive contact of the stopper with the disk in the attempt to the stop the plate may induce a stepwise effect to the motion of the plate driven by the rotary driving means. Regardless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide pulses of energy to the rotary driving means of Kobayashi to more quickly stop the plate from moving.

Kobayashi's embodiment of fig. 1 does not explicitly disclose the trays pivotally mounted. Kobayashi's embodiment of figs. 7 and 8 disclose trays pivotally mounted and describe such configuration as conventional (col. 1, lines 10-62). The horizontal plate is provided with through orifices defined by parallel arms each with attached lug shafts (7a) on

which baskets (7) with jigs (9) accommodating containers (8) with chemical or biological products are supported (figs. 1 and 8). The through orifices of the plate provide for mounting of containers (8), which are in the form of tubes. Since the baskets supporting jigs with containers are freely rotating, they may be in the upright or vertical position or assume a horizontally inclined position (figs. 1 and 8). It appears that rotational motion would cause the pivoting axis of the swings to offset toward the center of the plate relative to the vertical axis passing through the center of gravity of each tray. Prais discloses that the trays are pivotally mounted to impart the samples in the trays centrifugal force to cause separation of heavier and lighter fractions in the sample (col. 3, lines 7-22). It appears that rotational motion would cause the pivoting axis of the swings to offset toward the center of the plate relative to the vertical axis passing through the center of gravity of each tray. Wright discloses that the trays are pivotally mounted to effectively agitate the samples. Wright shows that rotational motion causes the pivoting axis of the swings to offset toward the center of the plate relative to the vertical axis passing through the center of gravity of each tray. Hankey discloses that the trays are pivotally mounted to impart centrifugal force to the samples to separate them. It appears that rotational motion would cause the pivoting axis of the swings to offset toward the center of the plate relative to the vertical axis passing through the center of gravity of each tray. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Kobayashi (embodiment of fig. 1) to provide trays pivotally mounted in two diametrically opposite notches in the horizontal plate as it is conventional as taught by Kobayashi (embodiment of figs. 7 and 8) and/or to impart centrifugal force or effective agitation to samples in order to separate them as taught by Prais and/or Wright and/or Hankey.

The limitation "the working plane on which it is intended to be positioned has an available area (S) of less than or equal to about 0.4 m^2" is considered by the Examiner a recitation of intended use of the claimed invention. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPQ 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Furthermore, it appears that "working plane" is a matter of perspective. A person may decide that the "working plane" is a small, unoccupied corner of a lab bench top surface with a surface area less than or equal to about 0.4 m^2. Although Kobayashi does not discuss the working plane, the centrifuge would have to be placed on something whether it is on the floor, table, chair, or hands. Regardless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a working plane with a surface area less than or equal to about 0.4 m^2 as necessary or desired to accommodate the device providing an optimal balance between space usage and adequate space to effective use the device. Furthermore, it has been held that discovering the optimum or workable ranges involves only routine skill in the art (*In re Aller*, 105 USPQ 233).

The limitation "the device is adapted to automatically receive tubes from the laboratory analyzer and to automatically permit the laboratory analyzer to retrieve tubes from the laboratory analyzer to perform biological or chemical reactions" is considered by the Examiner a recitation of intended use of the claimed invention. A recitation of the intended use of the claimed

invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPQ 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Furthermore, the laboratory analyzer is not positively recited, and the device is capable of cooperating with a laboratory analyzer to automatically permit the laboratory analyzer to receive tubes from the laboratory analyzer and to automatically permit the laboratory analyzer to retrieve tubes from the laboratory analyzer to perform biological or chemical reactions. Regardless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Kobayashi to include a laboratory analyzer to automatically receive and retrieve tubes for efficiency. Furthermore, it has been held that providing a mechanical or automatic means to replace manual activity, which has accomplished the same result, involves only routine skill in the art (*In re Venner*, 120 USPQ 192).

The external "useful" height appears to be a matter of perspective. A person may decide that the external "useful" height corresponds to the height of the rotor. It appears that this limitation is intrinsicly met. Regardless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the height of the device of Goodman since it has been held that discovering an optimum workable range involves only routine skill in the art (*In re Aller*, 105 USPQ 233) and that where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed

device was not patentably distinct from the prior art device (*Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984)).

Allowable Subject Matter

20. Claims 2, 13, 19, 20, 22, 23 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

21. Claim 4 is allowed.

22. Claim 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and rewritten in independent form including all of the limitations of the base claim and any intervening claims.

23. Claim 26 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

24. Applicant's arguments with respect to claims 1, 3, 6, 7-12, and 14-18 have been considered but are moot in view of the new ground(s) of rejection. Examiner maintains Brimhall in view of Kobayashi in light of new interpretation of the structure as necessitated by the amended claims.

25. Applicant's arguments filed 5/12/2004 have been fully considered but they are not persuasive. Applicant argues that there is a lack of suggestion or motivation to modify or combine the references. Applicant states that the Office Action states "it would have been obvious to modify the device of Brimhall to include the indexing means of Kobayshi for effectively and accurately stopping the centrifuging process" with nothing more said regarding

the obviousness of such a combination. Applicant submits that the Office Action fails to identify where in the prior art motivation for such a combination may be found. Applicant also submits that the Office Action does not provide a rationale as to why one of ordinary skill in the art would have been motivated to modify any of the references, such that a prima facie case of obviousness has not been established. Applicant submits that the Office Action states a result of general combination of the references but that is not the same as a reason why one of ordinary skill in the art would be motivated to combine the references however desirable the results may be. Applicant submits: "In contrast to the result-oriented analysis proffered in the Office Action, the MPEP specifically states that 'the prior art must suggest the desirability of the claimed invention.'" Applicant states that the Office Action does not identify where the prior art suggest the desirability of transmission according to independent claims. Applicant states that the Office Action appears to rely on the ease by which references can be combined contrary to the MPEP, which states "mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggest the desirability of the combination.

26. Examiner maintains that "it would have been obvious to modify the device of Brimhall to include the indexing means of Kobayshi for effectively and accurately stopping the centrifuging process" is suggestion, motivation, and rationale to combine. Brimhall discloses that the centrifuge apparatus is program operated to select the correct speed and duration of rotation of the rotor, such that how long the rotor rotates is important to the centrifugation process. Therefore, it is desirable to include the indexing means of Kobayashi to accurately stop to keep a time for centrifugal separation constant and making an accurate separation process possible (col.

4, lines 11-29). Kobayashi explicitly states "a centrifugal separator is obtained in which jigs mounted on the basket stop accurately under the small covers by means of the direction detection device, rotating arm positioning device, and basket positioning device...the centrifugal separator can be continuously and automatically operated, thus making it possible to keep a time required for centrifugal separation constant, and also making an accurate separation process possible" (col. 4, lines 16-29). Examiner cites MPEP 2144, which states: Rationale may be in a reference, or reasoned from common knowledge in the art, scientific principles, art-recognized equivalents, or legal precedent. The rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. The expectation of some advantage is the strongest rationale for combining references. The strongest rationale for combining references is a recognition, expressly or impliedly in the prior art or drawn from a convincing line of reasoning based on established scientific principles or legal precedent, that some advantage or expected beneficial result would have been produced by their combination. In this case, the rationale to combine Brimhall and Kobayashi is taught, since Brimhall desires control over the duration of the rotation and Kobayashi teaches the structure that provides accurate stopping to help control duration to the desired amount to keep time for centrifugation constant especially when dealing with the same sample at different times for accurate separation. The combination of Brimhall and Kobayashi produces the advantage or expected beneficial result of a centrifuge that can accurately stop to subject sample(s) to a controlling duration of centrifugation for accurate separation. This is especially important when

the different samples are centrifuged at different times but require the same conditions. The duration of centrifugation may come into play as an independent variable and distort the results.

Conclusion

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Quan whose telephone number is (571) 272-1261. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elizabeth Quan
Examiner
Art Unit 1743

eq

ARLEN SODERQUIST
PRIMARY EXAMINER